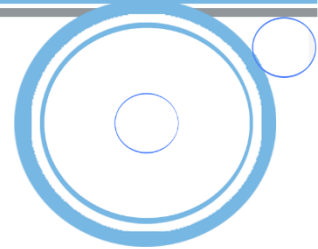


# Diabetes Care for Nursing Students Simulation Training at Bournemouth University



*“I really enjoyed it. Can we have more scenarios please?”*



## REQUIREMENT

Bournemouth University was interested in “understanding the mechanisms of the effect of virtual technologies on learning”<sup>1</sup>.

Daden were asked to develop a training exercise for nursing students on delivering care to deteriorating diabetic in-patient.

“... It really does make you really focused on the situation and it makes it feel a lot more real.”

“It is the reinforcement of that learning, and the real time feedback, safely... you can make lots of mistakes and you're not affecting anybody are you?”

“we don't normally get a chance to do that (link theory to practice) until we are in placement”

## OUR SOLUTION

BU staff flow-charted the required exercise and then we used our Trainingscapes immersive 3D authoring and delivery platform to rapidly develop the simulation.

Some assets were drawn from our existing inventories, and others were developed for the project but added to our generic hospital inventory for other projects.

On arrival in the room students can talk to the duty nurse for guidance, interact with the main items of equipment (including the glucose test kit and blood pressure meter), and also talk to the patient himself.

A background audio helps to reinforce the idea of being in a busy hospital.

A video walkthrough is at <https://www.youtube.com/watch?v=03CAqjK718>.

## RESULTS

Students using the simulation performed “significantly better”<sup>1</sup> in post-testing that those in the control group who used the existing paper exercise.

The VR group also had higher mean values for ENGAGEMENT, CONFIDENCE and KNOWLEDGE.

The research found that it was “the ‘engagement to immersion’ pathway which was responsible for leading to higher knowledge scores in the VR group.”<sup>1</sup>

The participants have reported that the VR exercise aided understanding of complex concepts, provided immediate feedback to them about their clinical decisions and provided more opportunities for safe practice

<sup>1</sup>Effect of non-immersive virtual reality simulation on diabetes care for nursing students: A randomised controlled trial. Singleton, H et al.